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BOARD OF EDITORS { Mr. Horace E. Smith, Chief Clerk of Weather Bureau,
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Mr. Edward B. Garriott, in charge of Review Room.

INTRODUCTION.

This REVIEW is based on reports for October, 1892, from 2,799 regular and voluntary observers. These reports are classified as follows: 164 reports from Weather Bureau stations; 45 reports from United States Army post surgeons; 1,920 monthly reports from state weather service and voluntary observers; 220 reports through the Central Pacific Rail-

way Company; 419 marine reports through the co-operation of the Hydrographic Office, Navy Department; 31 reports from Canadian stations; marine reports through the "New York Herald Weather Service"; monthly reports from local services established in all states and territories; and international simultaneous observations. Trustworthy newspaper extracts and special reports have also been used.

CHARACTERISTICS OF THE WEATHER FOR OCTOBER, 1892.

In the Atlantic coast states from New England to Florida and in parts of the Ohio and upper Mississippi valleys and Tennessee the month was the driest October on record. In many localities in the districts named serious inconvenience and suffering were caused by the failure of cisterns, wells, and streams. In Indian Territory excessive rainfall damaged cotton.

TEMPERATURE.

The month was warmer than usual, except in the middle and south Atlantic and Pacific coast states and in the middle Rocky Mountain and southern plateau regions. In the middle Missouri and Red River of the North valleys the month was the warmest October on record. The most important cold wave of the month advanced from the northeast slope of the Rocky Mountains to the south Atlantic and east Gulf states from the 21st to the 25th, carrying the frost line to the Gulf and south Atlantic states and northern Florida. From the 26th to the 28th the line of freezing weather extended to southern New Mexico, extreme northwestern Texas, and central Mississippi.

PRECIPITATION.

The monthly precipitation was deficient except in the middle and southern Rocky Mountain regions and the southwestern states. The most marked deficiency was noted in the middle Atlantic states and the Ohio Valley and Tennessee, where the monthly rainfall was 10 to 20 per cent. of the average amount for October. At Denver, Colo., the monthly precipitation was about five times greater than the average, and at Abilene, Tex., and Fort Smith, Ark., it was about double the usual amount for October. In the central Rocky Mountains the monthly snowfall was 20 to 40 inches. On the 11th and 12th a heavy snowstorm, with low temperature and high wind, interrupted travel and caused loss of life and stock in eastern Colorado. A notable feature of the month was a fall of .02 inch of rain from a cloudless sky at Eureka, Cal., the night of the 13th.

STORMS.

The most destructive storm of the month prevailed over the Great Lakes on the 28th and 29th. Many vessels were wrecked or damaged, and loss of life was reported. At Milwaukee, Wis., fire, driven by the high wind, destroyed property to the estimated value of \$5,000,000. The local storms of the month were generally of slight intensity.

ATMOSPHERIC PRESSURE (expressed in inches and hundredths).

The distribution of mean atmospheric pressure for October, 1892, as determined from observations taken daily at 8 a. m. and 8 p. m. (75th meridian time), is shown on Chart II by isobars.

The normal pressure for October is highest over the south Atlantic and east Gulf states, the Ohio Valley and Tennessee, and Oregon, where it is above 30.10, and it is above 30.05 along the Atlantic coast from Florida to Nova Scotia, and in a belt extending thence over the middle and lower Mississippi valleys, and thence to the north Pacific coast. The normal pressure is lowest in the Saskatchewan and lower Saint Lawrence valleys, and over southern California and the lower Colorado valley, where it is below 30.00.

In October there is usually an increase of pressure over the United States. The greatest increase generally occurs from the lower Colorado valley over the middle plateau region, where the normal pressure is more than .10 higher than for September.

In October, 1892, the highest mean pressure was shown in two extensive areas bounded by isobars of 30.10, one of which covered the middle plateau region; the other included districts lying between the Ohio and middle Mississippi valleys and the south Atlantic coast. In a wide belt extending from the Atlantic coast between the 30th and 40th parallels to the Pacific coast between the 40th and 45th parallels the mean pressure was above 30.05. The mean pressure was lowest